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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,022	05/05/2004	David B. Naughton	12353-004	9650
757 7590 01/17/2007 BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			EXAMINER GODFREY, KEITH JOSEPH	
			ART UNIT	PAPER NUMBER
			1732	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/840,022

Applicant(s)

NAUGHTON, DAVID B.

Examiner

Keith J. Godfrey

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/5/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8, 16, and 17 rejected under 35 U.S.C. 102(b) as being anticipated by Ladney, Jr. (US Patent 3,871,060).

As to claim 8, Ladney ('060) teaches the claimed process of manufacturing a molded article including: applying a base paint substance to the molding surface (column 4, lines 53-64), injecting a plastic polyolefin foam (thermoplastic resin) (column 4, lines 37-41) against the base paint and holding the foam against the base paint layer for a predetermined time to form the molded article having a surface. It is submitted that because the plastic injected foam is at a high temperature due to its melt state that any heat from said foam will transfer to areas of lower heat, like the base paint coating. It is further submitted that in order for adhesion to occur a degree of diffusion has occurred at the interface between the foam layer and the base paint layer.

As to claim 16, Ladney ('060) teaches spraying a layer of paint onto a molding surface (column 4, lines 53-64), and injecting a plastic polyolefin foam thereon (column 4, lines 37-41).

As to claim 17, Ladney ('060) teaches injection molding, hence teaching on injection molding apparatus (column 2, lines 40-45).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 5, 9-11, and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Ladney, Jr. (US Patent 3,871,060) in view of Nakajima et al. (US Patent 4,608,415).

Ladney ('060) teaches the basic claimed process of manufacturing a molded article including: applying a base paint substance to the molding surface (column 4, lines 53-64), injecting a plastic polyolefin foam (thermoplastic resin) (column 4, lines 37-41) against the base paint and holding the foam against the base paint layer for a predetermined time to form the molded article having a surface. It is submitted that because the plastic injected foam is at a high temperature due to its melt state that any heat from said foam will transfer to areas of lower heat, like the base paint coating. It is further submitted that in order for adhesion to occur a degree of diffusion has occurred at the interface between the foam layer and the base paint layer. As to claims 1 and 9, although Ladney ('060) teaches the use of a polyurethane base paint as the in-mold coating substance, Ladney ('060) does not specifically teach the use of a chlorinated polyolefin. Nakajima ('415) teaches the use of a chlorinated polyolefin resin used in the form of an aerosol paint for coating purposes (column 3, lines 63-65). Therefore it

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would have been obvious to one of ordinary skill in the art at the time the invention was made to use chlorinated polyolefins as a base paint coating material as taught by Nakajima ('415) in the process of Ladney ('060) because of the known advantages that chlorinated polyolefins provide such as improved adhesion and stability (column 5, lines 9-20) of Nakajima ('415). It is submitted that a chlorinated polyolefin improves the surface energy thereby improving adhesion.

As to claims 2, 5, 10, and 11 Nakajima ('415) teaches the use of the chlorinated polyolefin resin coating in the form of an aerosol paint (column 3, lines 63-66). It is submitted that, in an aerosol delivered product, a plurality of particles are sprayed directly from a pressurized solution of such product. Nakajima ('415) further teaches the chlorinated resins must be dissolved in solvents to make the aerosol solution (column 3, lines 63-66). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a chlorinated polyolefin article spray coating as taught by Nakajima ('415) in the process of Ladney ('060) because of the known advantages that chlorinated polyolefins provide such as improved adhesion and stability (column 5, lines 9-20).

As to claim 15, it is submitted that because the process of Ladney ('060) in view of Nakajima ('415) teaches the claimed process, then the resulting product would have a surface energy of at least 38 dynes per centimeter after the step of removing the molded article from the mold. Further, because Nakajima ('415) teaches improved adhesion of chlorinated polyolefin coatings, it is submitted that Ladney ('060) in view of Nakajima ('415) suggest the improved surface energy of at least 38 dynes/cm.

5. Claims 3, 4, 6, 7, 12-14, 18, and 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Ladney (US Patent 3,871,060) and Nakajima (US Patent 4,608,415) in further view of Rechenberg et al. (US Patent Publication 2004/0249075).

Ladney ('060) in view of Nakajima ('415) teach the basic claimed process as described above.

As to claim 3 and 14, although Ladney ('060) teaches the method of in-mold coating and Nakajima ('415) teaches the use of chlorinated polyolefin coatings, Ladney ('060) in view of Nakajima ('415) do not teach electrostatic spraying of said coatings. Rechenberg ('075) teaches the coating of a substrate using thermosetting polymer compositions (abstract). Rechenberg ('075) further teaches that the coating composition can be applied by an electrostatic spray involving the steps of charging the particles to be sprayed by passing them through a corona field and depositing said particles onto the grounded article (paragraph 0092). Therefore it would have been obvious to one skilled in the art at the time the invention was made to include the method of electrostatic spray taught by Rechenberg ('075) for applying a chlorinated polyolefin coating in the process of Ladney ('060) in view of Nakajima ('415), because of known advantages that electrostatic spraying provides such as reduced pinholes, hence providing for an improved product.

As to claim 4, Nakajima ('415) teaches the use of the chlorinated polyolefin resin coating in the form of an aerosol paint (column 3, lines 63-66). It is submitted that, in an aerosol delivered product, a plurality of particles are sprayed directly from a pressurized

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solution of such product. Nakajima ('415) further teaches the chlorinated resins must be dissolved in solvents to make the aerosol solution (column 3, lines 63-66). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a chlorinated polyolefin article spray coating as taught by Nakajima ('415) in the process of Ladney ('060) in view of Rechenberg ('075) because of the known advantages that chlorinated polyolefins provide such as improved adhesion and stability (column 5, lines 9-20).

As to claims 6, 7, 12, 13, 18, and 19 although Ladney ('060) teaches the method of in-mold coating and Nakajima ('415) teaches the use of chlorinated polyolefin coatings, Ladney ('060) in view of Nakajima ('415) do not teach the step of applying an electrically conductive substance. Rechenberg ('075) teaches electrically spraying a coating composition including carbon black (paragraph 0083). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use carbon black (electrically conductive substance) as taught by Rechenberg ('075) in the coating process taught by Ladney ('060) in view of Nakajima ('415) because of known advantages that carbon black provides such as aesthetic purposes (paragraph 0083) and electrostatic protection.

Conclusion


25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art contains teachings and methods of in-mold coating and article coating related with the present invention.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith J. Godfrey whose telephone number is 571-272-6391. The examiner can normally be reached on 6:00-5:00 Mon. - Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kjg


STEFAN STAIKOVICI, PHD
PRIMARY EXAMINER
11/8/02
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